

AUG 15 1997

VIA FAX AND MAIL

Gwen Barunas  
Bureau of Federal Case Management  
New Jersey Department of Environmental Protection  
P. O. 028  
Trenton, New Jersey 08625

Re: L.E. Carpenter Superfund Site, Wharton Borough, Morris  
County, New Jersey

Dear Ms. Barunas:

This letter hereby provides the United States Environmental Protection Agency's (EPA)'s comments on the work proposed in the Remedial Action Plan for Phase I Free Product Recovery, dated February 1997, and from the July 9, 1997, response letter from RMT, Inc. EPA has no comments on the July 9, 1997 response letter and RMT's response concerning actual free-product thickness is satisfactory. EPA agrees with the New Jersey Department of Environmental Protection that it will be necessary to closely monitor the removal rates of LNAPL for the first several months of operation of the recovery system to determine whether or not additional remedial efforts will be required to optimize product removal. In this regard, it is understood that it is better to start remedial actions as soon as possible and then evaluate the need for additional remedial action after new data has been collected and analyzed once the system has been operational for several months. Please forward these new data to EPA as soon as they become available.

Should you have any questions or comments on this letter please do not hesitate to give me a call at (212) 637-4411.

Sincerely yours,

Stephen Cipot, Project Manager  
Southern New Jersey Remediation Section

Attachment

bcc: Stephen Cipot, SNJRS  
Kimberly O'Connell, SNJRS

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#### **GENERAL COMMENTS:**

The work plan indicates that the free product plume is relatively stable and has a thicknesses of up to three feet. However, no discussions or calculations are provided to support the conclusions. If the reported free product thicknesses are based on bore product thickness only, this could result in significant errors in estimating drainable product volume. The apparent free product thickness, indicated by well bore product thickness, is typically much greater than the actual free product thickness in the surrounding soil. If the reported free product thicknesses are based on adjusted measurements please provide any relevant data and equations used to predict actual product thickness. Please provide information that supports the free product thicknesses reported.

The plan should consider the installation of extraction trenches in the free product plume areas to enhance recovery and minimize the amount of water extracted. Due to the shallow water table, extraction trenches should be seriously considered from both a productivity and cost-effectiveness standpoint as each extraction trench could replace several of the proposed vertical extraction wells. Limiting factors, such as large water table fluctuations and the presence of underground utilities should be investigated.

Due to the presence of potential PVC solvents (toluene, xylene, methyl ethyl ketone, etc.), in high concentrations in the ground water and in free product phase, PVC should not be used as a well casing material. Solvation occurs in the presence of these solvents and chemical degradation of the PVC casing can be expected. Stainless steel well casings should be used to avoid potential well casing degradation problems.

#### **SPECIFIC COMMENTS**

Page 4, Section 2.4 Soil Cuttings, Well Development Water, and Decontamination Water Disposal: Due to the presence of free product, decontaminating the drilling equipment between wells is not necessary and would add little to no benefit. This statement is incorrect. Contaminated material that adheres to the surface of drilling equipment may be transferred to uncontaminated surface and subsurface soil above the free-product contaminated soil. Drilling equipment must be decontaminated between boreholes to prevent cross-contamination.

Page 11, Section 3.2 Free-Product Removal Reporting. As stated in the general comment above, free-product thickness contour maps should include predicted actual free product thickness data. Apparent (well bore product) thickness data and predictive methods and/or formulas should be included and discussed in the report.